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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DINH, TAN X

ART UNIT PAPER NUMBER

2653

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,815

Applicant(s)

KWON, YOUNG-SIG

Examiner

TAN X. DINH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1) The amendment filed 12/12/2003 is acknowledged. New claims 14 and 15 are currently been added.

2) The I.D.S filed 12/31/2003 has been considered by the Examiner. However, the Japan and/or foreign document(s), if they have not been written in English, are considered to the extent that could be understood from the English Abstract and the drawings.

Form PTO-1449 is attached herein.

3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

4) (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) Claims 1-3,8,11,13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by WATANABE (5,499,252).

WATANABE discloses a method for providing sub-code data to a host computer in an optical disk drive as claimed in claims 1,11,13-15, comprising the step of:

setting the sub-code data whenever the data of predetermined unit is output from a buffer (Fig.1, Buffer RAM 18. In this case, the sub-code and TOC information are read and stored in buffer RAM 18. see the abstract);

transmitting the set sub-code data to the host computer when the sub-code data is request from host computer during

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reproduction mode (Fig.1, Host Computer 19. In this case, the sub-code reading circuit 19 fetches the sub-code data every time the sub-code data output from digital signal processing circuit 11, thereafter, the sub-code data read from RAM 18 and transmit to host computer 19 during reproducing mode. See column 5, lines 1-12).

As to claims 2 and 8, WATANABE shows sub-code data include track information, a relative address and an absolute address which determines using TOC information (see column 2, lines 49-53. It is noted that, the sub-code data and TOC information in every optical disk player contains track information (track number), a relative address (minute, second) and an absolute address (time address of entire disc).

As to claim 3, the setting sub-code data whenever data of one sector is output to buffer is inherent in WATANABE's since the sub-code and TOC information are read and stored in buffer together with data information at all times. This process continue from first sector, second sector and to the end of the disk.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7) Claims 4-7,9,10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WATANABE (5,499,252).

WATANABE discloses all the subject matter claimed as in claims 4 and 9, *except* to specifically show that the compact disc is recorded music (songs). However, the technique of recording music into compact disc is old and well known in the art (it is noted that, the compact disc with recorded music is always contained an absolute address in which the absolute address having information of reproduction time of each song or entire portion of the disc), therefore, to record music (songs) in WATANABE's compact disc as claimed is deem obvious to someone within the level of skill in the art.

As to claim 5, the increasing relative address (time address of each song) and absolute address (time address of entire disc) whenever data of one sector is output from buffer is inherent in WATANABE's since the sub-code and TOC information are read and stored in buffer together with data information at all times, when a new song (increases from last song) is stored in buffer which also stores a new relative address and absolute address (increases from last relative address and absolute address of last song).

As to claim 6, WATANABE discloses all the subject matter as claimed in claim 6, *except* to specifically show that the CD player capable of resetting the relative address when the last sector is output from buffer. It would have been obvious matter

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of design choice to modify the WATANABE's CD player by resetting the relative address when last sector is output from buffer, since applicant has not disclosed that having this resetting process could solve any stated problem or is for any particular purpose and it appears that the CD player would perform equally well with or without this resetting process.

As to claim 7, since WATANABE shows the optical disk is compact disc (CD, see column 1, lines 25-28) which common uses to storing plurality of music (songs) and the TOC of compact disc always contains the time address information such as reproduction time of each song, the reproduction time of entire disc, etc.,. thus, to determine a last sector of corresponding song is inherent in WATANABE's CD player.

Claims 10 and 12 add the features of: setting the optical disk drive to temporary pause mode in response to the buffer memory being full and transmitting the sub-code data to host computer when the host computer requests during temporary pause mode to claim 1, which are old and well known in the art as evident in applicant's prior art figure 2, steps 207, 209, 211, 213 and 215.

8) Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

9) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN X. DINH

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whose telephone number is (703) 308-4859. The examiner can normally be reached on Monday - Friday, 8:00AM - 5:30PM.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER

25 February 2004